



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/394,222	09/13/1999	WILLIAM J. DALLY	259709	3910
7590	01/08/2004		EXAMINER	
ROBERT J. CRAWFORD CRAWFORD MAUNU PLLC 1270 NORTHLAND DRIVE, SUITE 390 ST. PAUL, MN 55120			LANE, JOHN A	
			ART UNIT	PAPER NUMBER
			2188	J4
DATE MAILED: 01/08/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/394,222	DALLY, WILLIAM J.	
	Examiner	Art Unit	
	Jack A Lane	2188	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 10/15/03.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-31 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. §§ 119 and 120

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) All b) Some \* c) None of:  
1. Certified copies of the priority documents have been received.  
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) The translation of the foreign language provisional application has been received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

1. This Office action is responsive to the amendment filed 10/15/03. Claims 1-31 are presented for examination. Any objections or rejections made in the previous office action not specifically repeated below are withdrawn.
2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections/under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

3. Claims 1-31 are rejected under 35 U.S.C. § 102(e) as being clearly anticipated by Duluk, Jr. et al. (6,288,730).

The claimed “address buffer” corresponds to request queues 2621-0 and 2621-1 (fig. 13A). The claimed “memory array” corresponds to the RAM. The claimed “control circuit” corresponds to reorder logic 2623-0 and 2623-1 shown in figure 13B. The memory addresses/references stored in request queues 2621 are selected at any given cycle as claimed. Reorder logic reorder the addresses received from the request queues and presents the addresses to RAMBus memory controller 2649. The claim limitation

"as they leave the control circuit" corresponds to the 24 line output from reorder address queue to memory controller 2649. The claimed "read buffer" corresponds to in order return queue 2624.

In the Remarks filed 09/13/99, with respect to the effective filing date of the Duluk, Jr. et al. Pat. No. 6,288,730, Applicant argues:

The Examiner confirmed that the above section 102(e) rejections was based on the '730 reference's filing date of August 20, 1999....Notwithstanding Applicant's belief that Provisional Application No. 60/097,336 (identified on the cover of the '730 reference) fails to correspond to cited subject matter of the '730 reference

In response, the examiner contends the effective filing data of the Duluk patent is based on the August 20, 1999 filing date and the U.S. Provisional Application (60/097,336) filing data of August 20, 1998 (see the claim for benefit in col. 1)

Applicant must provide support for his contention that Provisional Application fails to correspond to the cited subject matter of the '730 reference.

Applicant also argues:

Assuming for example, that "RAM" refers to texture memory 1213 of FIG. 2, then it would not be clear how to reconcile this assertion with *Duluk*'s teaching at column 8, lines 58 *et seq.*, that defines texture memory 1213 as logic that acts to either store texture maps or locates requested texture maps from other sources as shown at the bottom of FIG. 2.  
and;

*Duluk*'s teaching...defines use of texture memory 1213 as operative only in response to undisclosed missed request logic.

In response, the examiner cannot find where on the indicted lines texture memory 1213 is characterized as “logic.” Figure 5 clearly shows texture memory 1213 as a plurality of plural block memory devices. The examiner cannot find where texture memory 1213 is operative only in response to missed request logic. Memory devices disk 1224, AGP memory 1222 and frame buffer 21 are response to miss logic if data cannot be found in texture memory 1213.

4. Applicant's arguments filed 10/15/03 have been fully considered but they are not deemed to be persuasive.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

6. A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

**Any response to this final action should be mailed to:**

**Box AF**

Under Secretary of Commerce for Intellectual Property and Director of the  
United States Patent and Trademark Office

PO Box 1450  
Alexandria, VA 22313-1450

**or faxed to:**

(703) 872-9306, (for Official communications intended for entry)

**Or:**

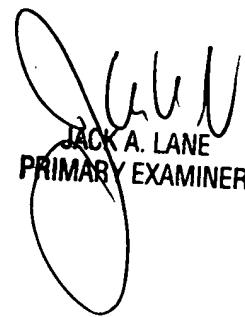
(703) 872-9306, (for Non-Official or Draft communications, please  
label "Non-Official" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121  
Crystal Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the  
examiner should be directed to Jack A. Lane whose telephone number is 703 305-3818. The  
examiner can normally be reached on Mon-Fri from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's  
supervisor, Mano Padmanabhan can be reached on 703 306-2903.

Any inquiry of a general nature or relating to the status of this application or proceeding  
should be directed to the receptionist whose telephone number is 703 305-3900.



JACK A. LANE  
PRIMARY EXAMINER